

TABLE AI. (Continued)

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Material	Condition	Transition conditions		Technique	Remarks	References
		Stress (GPa)	Compression (%)			
Ferroelectric ceramics						
(Continued)						
95% BaTiO ₃	Polycrystalline	...	...	E-5	Multiple wave structure observed	Reynolds <i>et al.</i> (1961)
5% CaTiO ₃						
95% BaTiO ₃	Polycrystalline	~0.7 GPa	...	E-4	$\rho_0 = 5.52$ to 5.56 Mg/m ³	Doran (1968)
5% CaTiO ₃						
Pb(Zr _{0.95} Ti _{0.05})O ₃	Polycrystalline ceramic	~0.2 GPa	...	E-4	$\rho_0 = 7.61$ to 7.89 Mg/m ³	Doran (1968)
1 wt % Nb ₂ O ₅						
Pb(Zr _{0.95} Ti _{0.05})O ₃	Polycrystalline ceramic	...	...	G	Electrical response, multiaxial strain	Lysne (1977)
Pb _{0.99} Nb _{0.02}	Polycrystalline ceramic	~6	...	G	Electrical response	Lysne <i>et al.</i> (1975)
(Zr _{0.65} Ti _{0.35}) _{0.98} O ₃						
Pb _{0.99} Nb _{0.02} [(Zr _{0.70} -	Polycrystalline ceramic	~0.3	...	G	Electrical response	Lysne (1975)
Sn _{0.30}) _{0.94} Ti _{0.06}] _{0.98} O ₃						
E. Others						
BaF ₂	[111], [100] crystals	...	...	G-8	Transition uncertain	Dandekar <i>et al.</i> (1973)
LiAlH ₄	Pressed powder	<25	...	E-14	Electrical resistance	Alder and Christian (1956a)
LiAlH ₄	Pressed powder	<5	...	E-14	Electrical resistance	Alder and Christian (1956a)
Teflon	...	0.5±0.01	8.3	G-8	...	Champion (1971)
Fe ₃ O ₄	Crystal	22±2	~8	E, P-4, 2	$\rho_0 = 5.20$ Mg/m ³	Syono <i>et al.</i> (1975)
α Fe ₂ O ₃	Crystal	~80	...	E, P-4, 3	$\rho_0 = 5.26$ Mg/m ³	Syono <i>et al.</i> (1975)
Nb ₃ Sn	...	...	...	...	Synthesis by shock loading	Otto <i>et al.</i> (1971)
Nb ₃ Sn	...	...	...	...	Synthesis by shock loading	Barskii <i>et al.</i> (1972)
Nb-Ge	...	...	...	...	Phases of unknown character synthesized	Barskii <i>et al.</i> (1972)
Nb-Pb	...	...	...	...	Phase of unknown character synthesized	Barskii <i>et al.</i> (1972)
Epoxy	...	...	...	P-2	High pressure transition	Carter (1973b)
Polyimide	...	...	...	P-2	High pressure transition	Carter (1973b)
Polycarbonate	...	...	...	P-2	High pressure transition	Carter (1973b)
Polysulfate	...	...	...	P-2	High pressure transition	Carter (1973b)
AlN	Wurtzite powder	...	...	D-17	ρ_0 from 0.41 to 1.14 Mg/m ³	Vereshchagin <i>et al.</i> (1969b)
Methacrylamide/trioxane	Pressed powder	...	...	D-19	Polymerization at pressures between 1.5 and 3 GPa	Adadurov <i>et al.</i> (1965)
Diphenylbutadiene	Purified, recrystallized pressed powder	...	...	D-19	Polymerization at pressures between 2.8 and 13 GPa	Al'tshuler <i>et al.</i> (1968b)

^aStarting material: wt % indicates weight percent, at. % indicates atomic percent. Condition: AR indicates "as received" or no treatment specified; Ann indicates annealed; CR indicates cold rolled; other treatments as specified. Transition conditions: Stress (GPa)—Values quoted are longitudinal component of stress associated with the transition. In those cases where it is difficult to assign a value to the transition but evidence for a transition is given, an entry is made without specific value. Compression (%)—Compression to initiate the transition. Technique: Loading methods: E—plane-wave explosive loading, D—divergent wave explosive loading, P—explosively driven flying plate, G—projectile impact from gun. Numbers indicate instrumentation scheme as numbered in Table I. Remarks: Sample thicknesses in mm, initial sample temperature T_0 if different from room temperature, + indicates the original author quotes an explicit dependence on sample thickness, ϕ indicates a finite rise time, * indicates stress relaxation, τ indicates that shear strength correction is possible from data in the paper, ψ indicates an explicit dependence on driving pressure, ? indicates other authors question data. Reference: Reference as cited at end of paper.

REFERENCES

- Adadurov, G. A., A. N. Dremin, S. V. Pershin, V. N. Rodionov, and Y. N. Ryabinin, 1962, *Zh. Prikl. Mekh. Tekh. Fiz.* 4, 81.
- Adadurov, G. A., I. M. Barkalov, V. I. Gol'danskii, A. N. Dremin, T. N. Ignatovich, A. N. Mikhailov, V. L. Tal'roze, and P. A. Yampol'skii, 1965, *Polym. Sci. USSR* 7, 196.
- Adadurov, G. A., Z. G. Aliev, L. O. Atovmyan, T. V. Bavina, Yu. G. Borod'ko, O. N. Breusov, A. N. Dremin, A. Kh. Muranevich, and S. V. Pershin, 1967, *Sov. Phys.—Dokl.* 12, 173.
- Adadurov, G. A., A. N. Dremin, and G. I. Kanel', 1970, *Combust. Explos. Shock Waves* 6, 456.
- Ahrens, T. J., 1972, *Tectonophysics* 13, 189.
- Ahrens, T. J., and J. T. Rosenberg, 1968, in *Shock Metamorphism of Natural Materials*, edited by B. M. French and N. M. Short (Mono Book Corp., Baltimore), p. 59.
- Ahrens, T. J., D. L. Anderson, and A. E. Ringwood, 1969, *Rev. Geophys.* 7, 667.
- Ahrens, T. J., T. Takahashi, and G. F. Davies, 1970, *J. Geophys. Res.* 75, 310.
- Alder, B. J., and R. H. Christian, 1956a, *Phys. Rev.* 104, 550.
- Alder, B. J., and R. H. Christian, 1956b, *Discuss. Faraday Soc.* 22, 44.
- Alder, B. J., and R. H. Christian, 1960, *Phys. Rev. Lett.* 4, 450.
- Alder, B. J., and R. H. Christian, 1961, *Phys. Rev. Lett.* 7, 367.
- Al'tshuler, L. V., 1965, *Sov. Phys.—Usp.* 8, 52.
- Al'tshuler, L. V., A. A. Bakanova, and R. F. Trunin, 1958, *Sov. Phys.—Dokl.* 3, 761.
- Al'tshuler, L. V., S. B. Kormer, M. I. Brazhnik, L. A. Vladimirov, M. P. Speranskaya, and A. I. Funtikov, 1960, *Sov. Phys.—JETP* 11, 766.
- Al'tshuler, L. V., A. A. Bakanova, and R. F. Trunin, 1962, *Sov. Phys.—JETP* 15, 65.
- Al'tshuler, L. V., M. N. Pavlovskii, L. V. Kuleshova, and G. V. Simakov, 1963, *Sov. Phys.—Solid State* 5, 203.
- Al'tshuler, L. V., R. F. Trunin, and G. V. Simakov, 1965, *Bull. Acad. Sci. USSR, Physics Solid Earth* No. 10, p. 657.
- Al'tshuler, L. V., M. N. Pavlovskii, and V. P. Drakin, 1967, *Sov. Phys.—JETP* 25, 260.
- Al'tshuler, L. V., B. N. Moiseev, L. V. Popov, G. V. Simakov, and R. F. Trunin, 1968a, *Sov. Phys.—JETP* 27, 420.
- Al'tshuler, L. V., I. M. Barkalov, I. N. Dulin, V. N. Zubarev, T. N. Ignatovich, and P. A. Yampol'skii, 1968b, *High Energy Chem.* 2, 73.
- Anan'in, A. V., A. N. Dremin, and G. I. Kanel', 1973, *Combust. Explos. Shock Waves* 9, 381.
- Anan'in, A. V., O. N. Breusov, A. N. Dremin, S. V. Pershin, and V. F. Tatsil, 1974, *Combust. Explos. Shock Waves* 10, 372.
- Anderson, D. L., and H. Kanamori, 1968, *J. Geophys. Res.* 73, 6477.
- Andrews, D. J., 1970, Ph.D. thesis, Washington State University.
- Andrews, D. J., 1971, *J. Comput. Phys.* 7, 310.
- Andrews, D. J., 1973, *J. Phys. Chem. Solids* 34, 825.
- Asay, J. R., 1974, *J. Appl. Phys.* 45, 4441.
- Asay, J. R., 1977, *J. Appl. Phys.*, accepted for publication.
- Asay, J. R., and D. B. Hayes, 1975, *J. Appl. Phys.* 46, 4789.
- Balchan, A. S., 1963, *J. Appl. Phys.* 34, 241.
- Balchan, A. S., and H. G. Drickamer, 1961, *Rev. Sci. Instrum.* 32, 308.
- Bancroft, D., E. L. Peterson, and S. Minshall, 1956, *J. Appl. Phys.* 27, 291.
- Band, W., and G. E. Duvall, 1961, *Am. J. Phys.* 29, 780.
- Banks, E. E., 1968, *J. Iron Steel Inst.* 206, 1022.
- Banus, M. D., 1969, *High Temp.—High Pressures* 1, 483.
- Barker, L., 1975, *J. Appl. Phys.* 46, 2544.
- Barker, L. M., and R. E. Hollenbach, 1964, *Rev. Sci. Instrum.* 35, 742.
- Barker, L. M., and R. E. Hollenbach, 1970, *J. Appl. Phys.* 41, 4208.
- Barker, L., and R. E. Hollenbach, 1972, *J. Appl. Phys.* 43, 4669.
- Barker, L., and R. E. Hollenbach, 1974, *J. Appl. Phys.* 45, 4872.
- Barskii, I. M., V. Y. Dikovskii, and A. I. Matysin, 1972, *Combust. Explos. Shock Waves* 8, 474.
- Bassett, W. A., T. Takahashi, H. Mao, and J. S. Weaver, 1968, *J. Appl. Phys.* 39, 319.
- Bassett, W. A., and J. D. Barnett, 1970, *Phys. Earth Planet. Inter.* 3, 54.
- Batsanov, S. S., G. E. Blokhina, and A. A. Deribas, 1965, *J. Struct. Chem.* 6, 209.
- Batsanov, S. S., 1968, in *Behavior of Dense Media Under High Dynamic Pressures* (Gordon and Breach, New York), p. 371.
- Batsanov, S. S., G. S. Doronin, E. M. Moroz, I. A. Ovsyannikova, and O. I. Ryabinina, 1969, *Combust. Explos. Shock Waves* 5, 193.
- Belyakov, L. V., V. P. Valitskii, N. A. Zlatin, 1965, *Sov. Phys.—Dokl.* 10, 69.
- Belyakov, L. V., V. P. Valitskii, N. A. Zlatin, and S. M. Mochalov, 1967, *Sov. Phys.—Dokl.* 11, 808.
- Benedick, W. B., 1965, *Rev. Sci. Instrum.* 36, 1309.
- Berger, M. J., S. Joigneau, and M. G. Bottet, 1960, *C. R. Acad. Sci. (Paris)* 250, 4331.
- Berger, J., S. Joigneau, and C. Fauquignon, 1962, in *Les Ondes de Detonation* (Centre de la Recherche Scientifique 15, Quai Anatole-France, Paris), p. 353.
- Bertholf, L. D., L. D. Buxton, B. J. Thorne, R. K. Byers, A. L. Stevens, and S. L. Thompson, 1975, *J. Appl. Phys.* 46, 3776.
- Bethe, H. A., 1942, Office of Scientific Research and Development Report No. 545, Serial No. 237.
- Blackburn, L. D., L. Kaufman, and M. Cohen, 1965, *Acta Metall.* 13, 533.
- Boreskov, G., I. Sazonova, N. Keyer, V. Kudinov, G. Gridasova, V. Maly, and L. Kefely, 1968, in *Behavior of Dense Media Under High Dynamic Pressures* (Gordon and Breach, New York), p. 389.
- Brazhnik, M. I., L. V. Al'tshuler, and L. A. Tarasova, 1969, *Combust. Explos. Shock Waves* 5, 352.
- Breed, B. R., and D. Venable, 1968, *J. Appl. Phys.* 39, 3222.
- Bridgman, P. W., 1935, *Phys. Rev.* 48, 893.
- Bridgman, P. W., 1942, *Proc. Am. Acad. Arts. Sci.* 74, 425.
- Bridgman, P. W., 1948, *Proc. Am. Acad. Arts. Sci.* 76, 71.
- Bridgman, P. W., 1956, *J. Appl. Phys.* 27, 659.
- Bundy, F. P., 1958, *Phys. Rev.* 110, 314.
- Bundy, F. P., 1965, *J. Appl. Phys.* 36, 616.
- Bundy, F. P., 1967, *J. Appl. Phys.* 38, 2446.
- Bundy, F. P., 1975, *Rev. Sci. Instrum.* 46, 1318.
- Bundy, F. P., and R. H. Wentorf, Jr., 1963, *J. Chem. Phys.* 38, 1144.
- Carter, W. J., 1973a, in *Metallurgical Effects at High Strain Rates*, edited by R. W. Rohde, B. M. Butcher, J. R. Holland, and C. H. Karnes (Plenum, New York), p. 171.
- Carter, W. J., 1973b, in *Phase Transitions—1973 Proceedings of the Conference on Phase Transitions and Their Applications in Materials Science*, edited by L. E. Cross (Pergamon, New York), p. 223.
- Champion, A. R., 1971, *J. Appl. Phys.* 42, 5546.
- Chao, E. C. T., 1967, *Science* 156, 192.
- Chao, E. C. T., E. M. Shoemaker, and B. M. Madsen, 1960, *Science* 132, 220.
- Chao, E. C. T., J. J. Fahey, J. Littler, D. J. Milton, 1962, *Am. Mineral.* 47, 807.
- Christian, J. W., 1965, *The Theory of Transformation in Metals and Alloys* (Pergamon, New York).